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REMARKS

Claims 2-18, 20-32, 34 and 35 are currently pending in the subject application and are presently under consideration. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I. Rejection of Claim 32 Under 35 U.S.C. §102(e)

Claim 32 stands rejected under 35 U.S.C. §102(e) as being anticipated by Paatelma (US 6,463,042 B1). Withdrawal of this rejection is respectfully requested for at least the following reasons. Paatelma does not disclose or suggest each and every element of applicant's invention as recited in the claim.

For a prior art reference to anticipate, 35 U.S.C. §102 requires that "*each and every element as set forth in the claim is found*, either expressly or inherently described, in a single prior art reference." *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (quoting *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

The claimed invention relates to a cellular communication system that adjusts the transmission power of different portions of a data packet to allow the transmission range of the entire data packet to have a more uniform range. To that end, independent claim 32 recites, "means for determining the transmission power levels of the first and second portion *based on a desired transmission range* for both the first and second portion." These aspects of the claimed invention allow a data packet to be transmitted at different data rates and different modulations to associate such packet with a desired transmission range. Pg. 8, ll. 25-27; Figs. 2-4d.

Paatelma relates to a mobile station power saving method employed to reduce power consumption of a receiving wireless terminal. Col. 2, ll. 21-27. In particular, Paatelma teaches reducing the transmission power of a second portion (*i.e.*, Data) of a data packet (col. 4, ll. 62-65) when the data therein is not valid (col. 2, ll. 37-40). The receiver can determine if the data is invalid upon receiving the first portion and at least a part (*e.g.*, 10 symbols) of the second portion of the data packet. If the is invalid, receiver can ignore the remainder of the second portion. Col. 2, ll. 42-54; col. 5, ll. 1-2. Consequently, Paatelma discloses adjustment of power levels in order to notify the receiver that the data portion does not contain valid data, whereas the subject

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invention determines the power levels *based upon a desired transmission range* for both the first and the second portion of the data packet.

Paatelma does not contemplate that transmission power level affects transmission range. Indeed, the reference is silent regarding transmission range, and therefore fails to address the problems solved by the claimed invention. However, the Examiner incorrectly contends at page 2 of the Advisory Action (dated July 5, 2005) that "a desired transmission range" is identical to "reduce the interference". It is readily apparent, however, that "transmission range" and "reduced interference" are distinct concepts, for which Paatelma is a primary example. The reference might reduce interference by allowing a receiver to ignore some of the second portion of a data packet, but not by ensuring only receivers within the desired transmission range receive the data packet.

Accordingly, Paatelma does not disclose, teach or suggest, "means for determining the transmission power levels of the first and second portion *based on a desired transmission range* for both the first and second portion", and this rejection of independent claim 32, as well as all claims that depend therefrom, should be withdrawn.

II. Rejection of Claims 29-31 Under 35 U.S.C. §103(a)

Claims 29-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Paatelma (US 6,463,042 B1) in view of Fischer (US 5,768,695). Withdrawal of this rejection is respectfully requested for at least the following reasons. Paatelma and Fischer, *et al.* either alone or in combination, fail to teach or suggest all features of the subject claims. Furthermore, there is not a reasonable expectation of success to combine the references.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *Second there must be a reasonable expectation of success.* Finally, the prior art reference (or references when combined) *must teach or suggest all the claim limitations.* The teaching or suggestion to make the claimed combination and the reasonable expectation of success must be

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found in the prior art and not based on the Applicant's disclosure.
See In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Applicant's claimed invention further relates to an access point system in a cellular communication system utilizing an IEEE 802.11 standard protocol. In particular, independent claim 29 recites, "the power control module receives a data packet...and dynamically adjusts the transmission power of the packet...*to facilitate transmitting the PLCP preamble and the data portion over a substantially similar transmission range*". The cited references, alone or in combination, do not teach or suggest these features.

As discussed above, Paatelma fails to disclose or suggest transmitting *over a substantially similar transmission range*. Fischer, *et al.*, which discloses a configurable MAC programmed to control the timing sequences of the ramp up and ramp down of various stages of a radio, does not make up for the aforementioned deficiencies of Paatelma. In addition, the Examiner incorrectly contends at page 3 of the Advisory Action that the references are properly combinable to incorporate the PLCP frame format defined by IEEE 802.11 standards taught by Fischer, *et al.* into Paatelma. Such a combination produces adverse consequences in Paatelma that the reference explicitly intends to prevent. For example, IEEE 802.11 standards provide for sending the data portion of a data packet at much higher data rates than the header portion and/or preamble, resulting in a packet that has a much smaller transmission range for the data portion. Paatelma does not contemplate different data rates for different portions of a packet, or the resultant problem, which is solved by the subject invention, caused by a header portion with a much greater transmission range than the data portion. Paatelma in fact compounds this problem because it reduces the power level of the data portion (col. 4, ll. 62-65), thereby further reducing the transmission range of the data portion. The result of such a combination would be receivers that receive valid header/preamble portions of data packets over a very large range but are unable to receive the corresponding data portions. The receivers would then be occupied until, for example, a time-out event, thereby increasing the interference whereas Paatelma, which must receive at least a part of both portions to be operable, purports to reduce interference. Therefore, the Examiner's proposed combination does not yield a *reasonable* expectation of success. Accordingly, for at least the foregoing reasons, this rejection of claims 29-31 should be withdrawn.

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III. Rejection of Claims 2-5, 7-8, 18, 20-28 and 34-35 Under 35 U.S.C. §103(a)

Claims 2-5, 7-8, 18, 20-28 and 34-35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Paatelma (US 6,463,042 B1) in view of Hassan, *et al.* (US 6,301,231 B1). Withdrawal of this rejection is respectfully requested for at least the following reasons. Neither Paatelma nor Hassan, *et al.*, alone or in combination, teach or suggest all claimed features of the subject invention. Additionally, it is improper to combine Paatelma with Hassan, *et al.* because the references themselves provide neither the motivation nor any suggestion of desirability to make such a combination.

The prior art items themselves must suggest the desirability and thus the obviousness of making the combination without the slightest recourse to the teachings of the patent or application. Without such independent suggestion, the prior art is to be considered merely to be inviting unguided and speculative experimentation which is not the standard with which obviousness is determined. *Amgen, Inc. v. Chugai Pharmaceutical Co. Ltd.*, 927 F.2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991); *In re Laskowski*, 871 F.2d 115, 117, 10 USPQ2d 1397, 1398 (Fed. Cir. 1989); *In re Dow Chemical Co.*, 837 F.2d 469, 473, 5 USPQ2d 1529, 1532 (Fed. Cir. 1988); *Hodosh v. Black Drug*, 786 F.2d at 1143 n.5., 229 USPQ at 187 n.4.; *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1985) (emphasis added).

With respect to independent claim 2, applicant's claimed invention recites, "the communication unit transmits *the first portion of the data packet at a first data rate and the second portion of the data packet at a second data rate*". These aspects of the claimed invention allow a single data packet to achieve a substantially similar transmission range even when different portions of the data packet are propagated at different data rates, such as when utilizing IEEE 802.11 protocol. By dynamically adjusting the power levels of the various portions of a data packet when those portions have different data rates, the transmission range can be made more uniform. Neither Paatelma nor Hassan, *et al.*, alone or in combination, teach or suggest these features.

Hassan, *et al.* relates to a satellite communication system wherein an Earth-based terminal can transmit to multiple satellites if a single satellite cannot handle the data rate at which the terminal desires to transmit. In particular, Hassan, *et al.* is concerned with achieving a

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desired bandwidth for data (see col. 7, ll. 25-26; col. 9, ll. 27-31; col. 9, ll. 46-47) by apportioning the data among multiple satellites. The reference does not apportion individual data packets to transmit those individual portions of a data packet to different satellites (e.g., sending the header portion to one satellite at one data rate, and the data portion to another satellite at a second data rate). However, the Examiner maintains that Hassan, *et al.* discloses the aforementioned claim features by way of the following cited passage, which is provided for sake of clarity below:

The system also includes a communication controller which, in response to the reply from the first satellite, apportions the data into first and second data portions. The transmitter establishes a first communication link with the first satellite to transmit the first data portion to the first satellite at the second data rate and, while maintaining the first communication link, establishes a second communication link with the second satellite to transmit the second data portion to the second satellite at a third data rate (which, when summed with the second data rate equals the first data rate) (emphasis added).

It is respectfully submitted that the Examiner is confusing "data" with "data packet", and "data portion" with "packet portion" in order to make this rejection. The reference does not contemplate transmitting *the first portion of the data packet at a first data rate and the second portion of the data packet at a second data rate*. Instead, Hassan, *et al.* discloses transmitting data (which is comprised of one or more complete data packets) to a satellite at one data rate, and the rest of the data to a second satellite at a second data rate. The reference does not, for example, send the header portion of a packet to one satellite and the data portion to a different satellite.

Moreover, the Examiner has impermissibly combined these references without providing adequate motivation to do so. There is no reason suggested by the references, nor has the Examiner provided a compelling reason, to incorporate the teachings of Hassan, *et al.* (*i.e.*, to apportion data among multiple receivers) into Paatelma in order to adapt data packets as the reference teaches. To the contrary, Paatelma requires a single receiver to receive all the data in order to make the power level comparison between the portions. At page 6 of the Final Office Action (dated March 11, 2005), the Examiner improperly suggested, "it would have been obvious to [one of] ordinary skill in the art at the time of the invention to combine the above

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teaching of Hassan, *et al.* with Paatelma, in order to provide a busy tones that indicates a base station is in an overload condition, therefore, improve the performing transmission data rate allocation of a high speed wireless communication network.” Applicant’s representative duly traversed this rationale, and the Examiner responds, at pages 5-6 of the Advisory Action, that the new motivation to combine is “to provide a system that has better performance with high signal qualities”. It is respectfully submitted that neither rationale appears to relate in any way to the references themselves, nor to a benefit the proposed combination could provide. Accordingly, the Examiner has failed to make a *prima facie* case for obviousness and this rejection of independent claim 2, as well as all associated dependent claims, should be withdrawn.

With respect to independent claims 20 and 35, the claimed invention relates to transmitting a data packet in a cellular communication system. Independent claim 20 (and similarly independent claim 35) recites, “transmitting a third portion of a data packet at a third transmission *power level*”.

The Examiner concedes Paatelma does not disclose or suggest these features of the claimed invention, but incorrectly contends that Hassan, *et al.* will remedy the deficiencies, citing the reference at column 2, lines 17-27 and column 2, lines 55-62. However, the indicated portions teach that data may be apportioned and transmitted at different data rates rather than different power levels, as provided for in the subject claims. Nowhere in the reference is it taught or suggested to adjust the transmission *power level* of a third portion of a data packet. Moreover, the Examiner has failed to provide proper motivation to combine these references, as indicated above regarding independent claim 2. Accordingly, the rejection of independent claims 20 and 35, as well as all claims that depend therefrom, should be withdrawn.

IV. Rejection of Claims 6 and 9-17 Under 35 U.S.C. §103(a)

Claims 6 and 9-17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Paatelma (US 6,463,042 B1) in view of Hassan, *et al.* (US 6,301,231 B1) and further in view of Fischer, *et al.* (US 5,768,695). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claims 6 and 9-17 depend indirectly upon claim 2, which is believed to be in condition for allowance. Therefore, claims 6 and 9-17 are also believed to be allowable. Additionally, it is

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improper to combine Hassan, *et al.* with Paatelma for the aforementioned reasons. Accordingly, this rejection should be withdrawn.

CONCLUSION


The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [TELNP200US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number below.

Respectfully submitted,

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